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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,011

10/20/2003

Amber D. Huffman

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06/08/2006

BUCKLEY, MASCHOFF, TALWALKAR LLC

5 ELM STREET

NEW CANAAN, CT 06840

EXAMINER

NAMAZI, MEHDI

ART UNIT

PAPER NUMBER

2189

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,011	HUFFMAN ET AL.	
	Examiner	Art Unit	
	Mehdi Namazi	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 and 29 is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed March 9, 2006.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Takeuchi et al. (U.S. Pub. 2005/0080842).

As per claims 1, 10, 12, and 36, AAPA teaches determining at a storage device that a current media status has changed; and transmitting an asynchronous message to a host system as a result of the determination (Specification, page 2 paragraph 1, by inserting or removing a CD from CD drive the storage sends an asynchronous message to the host as the result of insertion or removal, the message is asynchronous because the message is sent independent of any timing mechanism).

As per claims 1, 10, and 36, AAPA teaches the claimed invention but fails to teach the asynchronous message can also be transmitted for a reason other than a current media status change.

Takeuchi teaches an interface and packet transfer method wherein the device uses a set device bits packet at the time of termination of data transfer and notifies error

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information and status information to the host (page 8, paragraph 135).

Therefore, it would have been obvious to person of ordinary skill in the art at the time of the invention was made to incorporate the method of using a set device bits packet as taught by Takeuchi in corresponding to the method of sending asynchronous messages to the host as taught by AAPA in order to accept the next command without cancellation of the currently executed command during data transfer (page 1, paragraph 6).

As per claim 10 Takeuchi teaches a detection unit (paragraph 21), and an interface unit (paragraph 4).

As per claims 2, 11, 18, Takeuchi teaches the asynchronous message is associated with a serial advanced technology attachment interface (page 1, paragraph 4, lines 7-8).

As per claims 3, 19, Takeuchi teaches the asynchronous message is associated with a set device bits packet (page 8, paragraph 135).

As per claims 4 and 5, AAPA teaches determining is performed while the storage device is in a lower-power state (specification, page 2, paragraph 1, prior to inserting CD into CD drive the storage device is in a low-power state).

As per claims 6, 17, 25, AAPA teaches receiving from the host system a

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command to adjust a power state associated with the storage device (specification, page 2, paragraph 1, lines 7-8).

As per claims 7, 13, 16, 22, AAPA teaches receiving from the host system a query for a current media status', and transmitting to the host system an indication of the current media status (specification, page 2, paragraph 1 , Lines 5-7, the host system may need to determine whether or not the removable media is currently present in the storage device, wherein by inserting a CD into disk drive a message will be send to host).

As per claims 8, 14, 23, AAPA teaches the current media status indicates at least one of : (i) an absence of a removable storage media, and (ii) a presence of a removable storage media (specification, page 2, Lines 2-4, by inserting or removing CD from storage device, the storage device transmit information to a host system).

As per claim 9, MPA teaches the storage device comprises a compact disc drive (specification, page 2, line 2).

As per claim 15, AAPA teaches receiving at a host system an asynchronous message from a storage device as a result of a current media status change (Specification, page 2 paragraph 1, by inserting or removing a CD from CD drive sends an asynchronous message to host as the result of insertion or removal, it is asynchronous because the message is sent independent of any timing mechanism), arranging for a power state associated with the storage device to be adjusted as a result

of the asynchronous message (specification, page 2, paragraph 1, Lines 7-8).

As per claim 15, AAPA teaches the claimed invention but fails to teach the asynchronous message can also be transmitted for a reason other than a current media status change.

Takeuchi teaches an interface and packet transfer method wherein the device uses a set device bits packet at the time of termination of data transfer and notifies error information and status information to the host (page 8, paragraph 135).

Therefore, it would have been obvious to person of ordinary skill in the art at the time of the invention was made to incorporate the method of using a set device bits packet as taught by Takeuchi in corresponding to the method of sending asynchronous messages to the host as taught by AAPA in order to accept the next command without cancellation of the currently executed command during data transfer (page 1, paragraph 6).

As per claim 20, Takeuchi teaches generating an interrupt to a storage device driver in response to the asynchronous message (paragraph 8).

As per claim 21, AAPA teaches a storage media having stored thereon instructions that when executed by a machine result in the following (specification page 2, paragraph 1, the instruction already loaded into the CD drive wherein by inserting or removing a CD from the drive, it sends a message to host):

Receiving at a host system an asynchronous message from a storage device as a result of a current media status change (Specification, page 2 paragraph 1, by inserting or removing a CD from CD drive sends an asynchronous message to host as the result of

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insertion or removal, it is asynchronous because the message is sent independent of any timing mechanism), arranging for a power state associated with the storage device to be adjusted as a result of the asynchronous message (specification, page 2, paragraph 1, Lines 7-8).

As per claim 21, AAPA teaches the claimed invention but fails to teach the asynchronous message can also be transmitted for a reason other than a current media status change.

Takeuchi teaches an interface and packet transfer method wherein the device uses a set device bits packet at the time of termination of data transfer and notifies error information and status information to the host (page 8, paragraph 135).

Therefore, it would have been obvious to person of ordinary skill in the art at the time of the invention was made to incorporate the method of using a set device bits packet as taught by Takeuchi in corresponding to the method of sending asynchronous messages to the host as taught by AAPA in order to accept the next command without cancellation of the currently executed command during data transfer (page 1, paragraph 6).

As per claim 24, AAPA teaches a host processor (specification, page 2, paragraph 1, host is the processor, and a disk drive (specification, page 2, line 2, Compact Disc (CD) drive), wherein the disk drive is to transmit asynchronous message to the host processor indicating that a current disk status has changed (Specification, page 2 paragraph 1, by inserting or removing a CD from CD drive sends an asynchronous message to host as the result of insertion or removal, it is asynchronous

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because the message is sent independent of any timing mechanism).

As per claim 24, AAPA teaches the claimed invention but fails to teach the asynchronous message can also be transmitted for a reason other than a current media status change.

Takeuchi teaches an interface and packet transfer method wherein the device uses a set device bits packet at the time of termination of data transfer and notifies error information and status information to the host (page 8, paragraph 135).

Therefore, it would have been obvious to person of ordinary skill in the art at the time of the invention was made to incorporate the method of using a set device bits packet as taught by Takeuchi in corresponding to the method of sending asynchronous messages to the host as taught by AAPA in order to accept the next command without cancellation of the currently executed command during data transfer (page 1, paragraph 6).

Allowable Subject Matter

4. Claims 26 and 29 are allowed.

Response to Arguments

5. Applicant's arguments filed March 9, 2006 have been fully considered but they are not persuasive.

With respect to Applicant's argument that AAPA does not teach an asynchronous reporting of the change, the Examiner notes that it is the combination of AAPA and Takeuchi et

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al. which teaches asynchronous reporting. Particularly, Takeuchi et al. teaches the “set device bits packet”, which is an asynchronous message.

Applicant further argues that Takeuchi et al. does not teach “change in current media status”. However, AAPA is relied upon to teach notifying a host of a change in media status (by inserting or removing a media). The teachings of Takeuchi et al. are relied upon to teach an asynchronous method (set device bits packet) that one would be motivated to use as a means to inform the host of the change.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

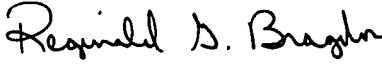
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Namazi whose telephone number is 571-272-4209. The examiner can normally be reached Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald G. Bragdon can be reached on 571-272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MN

May 22, 2006


REGINALD G. BRAGDON
PRIMARY EXAMINER